Xrootd Federation Status Monitor

- A Nagios-based system that directly checks participating sites in the Federation and validates Federation linkages

- Provides a status monitor of sites in the federation

- Provides functional views of the federation mechanisms:

  - Is data from Site A visible from a remote client directly accessing the site's local redirector

  - Is data from Site A visible from a remote client via the global redirector?

- Provides historical views of site availability (& reliability) using these checks

- Ganglia-based system will provide metrics (Dubna group)

features, I

- Set of Nagios probes that directly checks participating sites in the Federation, and checks federation linkages

- Requires only read-only access to sites

- Sites pre-place a set of input files in their local Xrootd storage system

- Probe checks *direct* copy access from sites: simple xrdcp directly from site

  - Codes: green: okay; yellow: low eff; red: down

  - Consider spectrum shading similar to ATLAS dashboard reliability

- Probe which checks *federated* copy access

  - Codes: (same)

- Dashboard summary

- Site opt-in/opt-out feature

- Site downtime, offline feature

- Email notification to a list when problems

features, 2

- Separate displays for Tier1-Tier2 sites (pledged resources) versus Tier3 sites

- Advanced: if we deploy two branches, monitor redirection between them

- Global 1, 2 could be represent different redirection options

TIER 1/TIER 2 FEDERATION BRANCH

Site	Direct	Global 1	Global 2
BNL			
AGLT2			
MWT2			
NET2			
SWT2			
WT2			

TIER 3 FEDERATION BRANCH

Site	Direct	Global 1	Global 2
Argonne			
BNL			
Chicago			
Duke			
SLAC			
SMU			
UTA			
OSG ITB			